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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/883,069

DATE: 05/07/2002  
 TIME: 09:58:49

#5

Input Set : A:\883069.txt  
 Output Set: N:\CRF3\05072002\I883069.raw

```

3 <110> APPLICANT: Palatin Technologies, Inc.
4     Shubh, Sharma
5     Yiqun, Shi
7 <120> TITLE OF INVENTION: Metallopeptide Combinatorial Libraries and Applications
9 <130> FILE REFERENCE: 70025
11 <140> CURRENT APPLICATION NUMBER: 09/883,069
12 <141> CURRENT FILING DATE: 2001-06-14
14 <150> PRIOR APPLICATION NUMBER: US 60/112,235
15 <151> PRIOR FILING DATE: 1998-12-14
17 <150> PRIOR APPLICATION NUMBER: PCT/US99/29743
18 <151> PRIOR FILING DATE: 1999-12-14
20 <160> NUMBER OF SEQ ID NOS: 13
22 <170> SOFTWARE: PatentIn version 3.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 4
26 <212> TYPE: PRT
C--> 27 <213> ORGANISM: artificial
29 <220> FEATURE:
30 <223> OTHER INFORMATION: tetrapeptide metal ion binding sequence
32 <400> SEQUENCE: 1
34 Gly Gly Gly Gly
35 1
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 4
39 <212> TYPE: PRT
C--> 40 <213> ORGANISM: artificial
42 <220> FEATURE:
43 <223> OTHER INFORMATION: single-pot metallopeptide library member
45 <400> SEQUENCE: 2
47 Asn Gln Cys Glu
48 1
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 4
52 <212> TYPE: PRT
C--> 53 <213> ORGANISM: artificial
55 <220> FEATURE:
56 <223> OTHER INFORMATION: single-pot metallopeptide library member
58 <220> FEATURE:
59 <221> NAME/KEY: misc_feature
60 <222> LOCATION: (2)..(2)
61 <223> OTHER INFORMATION: Xaa is Trp, Homophe, 2'-Nal or Phg
64 <400> SEQUENCE: 3
W--> 66 His Xaa Cys Trp

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```

67 1
69 <210> SEQ ID NO: 4
70 <211> LENGTH: 4
71 <212> TYPE: PRT
C--> 72 <213> ORGANISM: artificial
74 <220> FEATURE:
75 <223> OTHER INFORMATION: tetrapeptide message sequence of alpha-MSH
77 <400> SEQUENCE: 4
79 His Phe Arg Trp
80 1
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 5
84 <212> TYPE: PRT
C--> 85 <213> ORGANISM: artificial
87 <220> FEATURE:
88 <223> OTHER INFORMATION: melanocortin-receptor specific metalloptide sequence
90 <400> SEQUENCE: 5
92 His Phe Arg Cys Trp
93 1 5
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 4
97 <212> TYPE: PRT
C--> 98 <213> ORGANISM: artificial
100 <220> FEATURE:
101 <223> OTHER INFORMATION: metalloptide library member
103 <220> FEATURE:
104 <221> NAME/KEY: misc_feature
105 <222> LOCATION: (2)..(2)
106 <223> OTHER INFORMATION: Xaa is Phelylglycine
109 <400> SEQUENCE: 6
W--> 111 His Xaa Cys Trp
112 1
114 <210> SEQ ID NO: 7
115 <211> LENGTH: 4
116 <212> TYPE: PRT
C--> 117 <213> ORGANISM: artificial
119 <220> FEATURE:
120 <223> OTHER INFORMATION: metalloptide library member
122 <400> SEQUENCE: 7
124 His Trp Cys Trp
125 1
127 <210> SEQ ID NO: 8
128 <211> LENGTH: 4
129 <212> TYPE: PRT
C--> 130 <213> ORGANISM: artificial
132 <220> FEATURE:
133 <223> OTHER INFORMATION: metalloptide library member
135 <220> FEATURE:
136 <221> NAME/KEY: misc_feature

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137 <222> LOCATION: (2)..(2)
138 <223> OTHER INFORMATION: Xaa is Homophe
141 <400> SEQUENCE: 8
W--> 143 His Xaa Cys Trp
144 1
146 <210> SEQ ID NO: 9
147 <211> LENGTH: 4
148 <212> TYPE: PRT
C--> 149 <213> ORGANISM: artificial
151 <220> FEATURE:
152 <223> OTHER INFORMATION: metallopeptide library member
154 <220> FEATURE:
155 <221> NAME/KEY: misc_feature
156 <222> LOCATION: (2)..(2)
157 <223> OTHER INFORMATION: Xaa is 2'-Naphthylalanine
160 <400> SEQUENCE: 9
W--> 162 His Xaa Cys Trp
163 1
165 <210> SEQ ID NO: 10
166 <211> LENGTH: 4
167 <212> TYPE: PRT
C--> 168 <213> ORGANISM: artificial
170 <220> FEATURE:
171 <223> OTHER INFORMATION: metallopeptide sequence targeted for human neutrophil
elastase
173 <400> SEQUENCE: 10
175 Leu Ser Cys Val
176 1
178 <210> SEQ ID NO: 11
179 <211> LENGTH: 4
180 <212> TYPE: PRT
C--> 181 <213> ORGANISM: artificial
183 <220> FEATURE:
184 <223> OTHER INFORMATION: metallopeptide sequence targeted for human neutrophil
elastase
186 <400> SEQUENCE: 11
188 Ile Ser Cys Val
189 1
191 <210> SEQ ID NO: 12
192 <211> LENGTH: 5
193 <212> TYPE: PRT
C--> 194 <213> ORGANISM: artificial
196 <220> FEATURE:
197 <223> OTHER INFORMATION: two cysteine metallopeptide library member
199 <220> FEATURE:
200 <221> NAME/KEY: misc_feature
201 <222> LOCATION: (1)..(1)
202 <223> OTHER INFORMATION: Xaa is Tyr(But)
205 <220> FEATURE:
206 <221> NAME/KEY: misc_feature
207 <222> LOCATION: (2)..(2)

```

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Input Set : A:\883069.txt

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```

208 <223> OTHER INFORMATION: Xaa is Cys(Trt)
211 <220> FEATURE:
212 <221> NAME/KEY: misc_feature
213 <222> LOCATION: (3)..(3)
214 <223> OTHER INFORMATION: Xaa is an alpha amino acid
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <222> LOCATION: (5)..(5)
220 <223> OTHER INFORMATION: Xaa is Cys(StBu)
223 <400> SEQUENCE: 12
W--> 225 Xaa Xaa Xaa Phe Xaa
      226 1          5
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 5
230 <212> TYPE: PRT
C--> 231 <213> ORGANISM: artificial
      233 <220> FEATURE:
234 <223> OTHER INFORMATION: two cysteine metalloprotein library member
236 <220> FEATURE:
237 <221> NAME/KEY: misc_feature
238 <222> LOCATION: (1)..(1)
239 <223> OTHER INFORMATION: Xaa is Tyr(But)
242 <220> FEATURE:
243 <221> NAME/KEY: misc_feature
244 <222> LOCATION: (2)..(2)
245 <223> OTHER INFORMATION: Xaa is Cys(Trt)
248 <220> FEATURE:
249 <221> NAME/KEY: misc_feature
250 <222> LOCATION: (5)..(5)
251 <223> OTHER INFORMATION: Xaa is Cys(StBu)
254 <400> SEQUENCE: 13
W--> 256 Xaa Xaa Gly Phe Xaa
      257 1          5

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/883,069

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Input Set : A:\883069.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 2  
Seq#:6; Xaa Pos. 2  
Seq#:8; Xaa Pos. 2  
Seq#:9; Xaa Pos. 2  
Seq#:12; Xaa Pos. 1,2,3,5  
Seq#:13; Xaa Pos. 1,2,5

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/883,069

DATE: 05/07/2002

TIME: 09:58:50

Input Set : A:\883069.txt

Output Set: N:\CRF3\05072002\I883069.raw

L:27 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1  
L:40 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2  
L:53 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3  
L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:72 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4  
L:85 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5  
L:98 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6  
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:117 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7  
L:130 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8  
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:149 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9  
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:168 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10  
L:181 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11  
L:194 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12  
L:225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:231 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13  
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0